



# Information Management

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LtCol Michael J. Burke

# Purpose



MSTP

- Define Information Management
- Identify information management characteristics and processes
- Present key information management personnel
- Identify systems in the USMC and how they link to joint arena
- Provide a synopsis of current challenges

# References



MSTP

MCDP 5

Planning

MCDP 6

Command and Control



U.S. Marine Corps

PCN 16 2 0000 01 00

MCWP 3-40.2

Information  
Management



U.S. Marine Corps

PCN 143 00004 00

MCWP 3-40.2

MAGTF Command and  
Control



U.S. Marine Corps

PCN 143 00004 00

JTF-IM

# Definition



MSTP

- “Information management includes **all activities** involved in the identification, collection, filtering, fusing, **processing**, **focusing**, **dissemination**, and usage of information. It assembles information that promotes understanding of the battlespace...”

MCWP 3-40.2

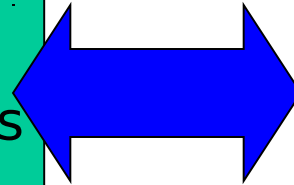
# Core Components



MSTP

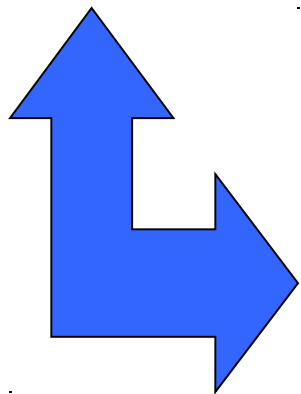
## Information

- Information Requirements
- Information Flow



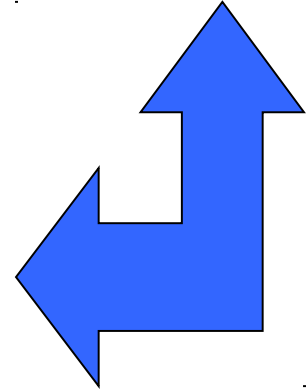
## People

- Command Relationships
- Organization of the Force



## C2 Support Structure

- Organizations
- Equipment
- Procedure
- Facilities



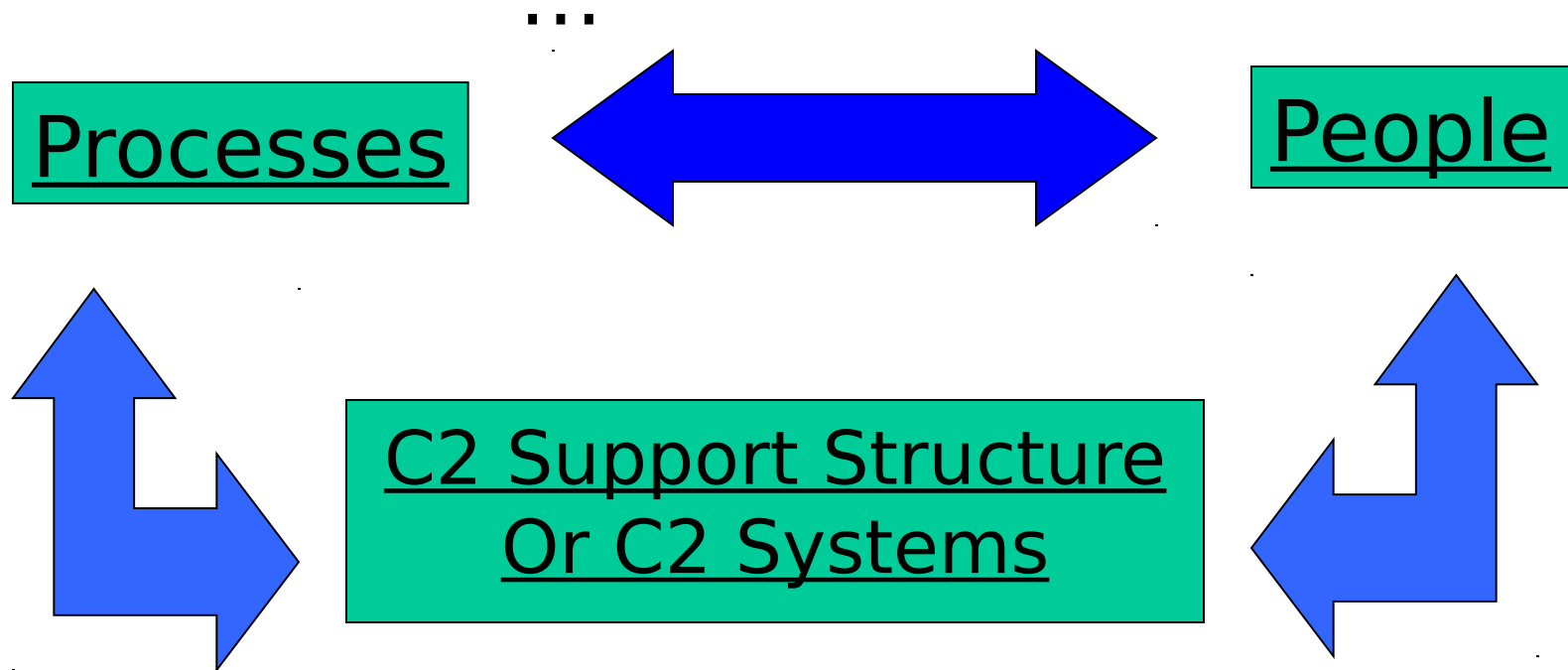
MCWP 3-40.2

# Core Components ... Again



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Viewed a bit differently, IM is





# Purpose

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- Information serves two purposes:
  - Facilitate situational awareness
  - Assists Cmdrs and Staffs coordinate actions / make decisions
- Effective flow of information
  - Top down to unify the force
  - Bottom up to monitor execution and assist assessment
  - Laterally to maintain unity of effort
- Create a clear picture for the commanders and staffs
- The right information, when it's needed, in the right format



# Information Principles

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- Principles for effective information management:
  - requirements should determine info flow
  - tailor to the commander and staff
  - use multiple sources
  - deliver on time
  - create flexible and redundant procedures
  - protect information

MCWP 3-40.2



# What Is Quality Information?



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- ACCURACY – conveys the true situation
- RELEVANCE – applies to the mission, task, or situation
- TIMELINESS – available in time to make decisions
- USABILITY – common, explicit formats and displays
- COMPLETENESS – all necessary information
- BREVITY – only the level of detail required
- SECURITY – afforded adequate protection

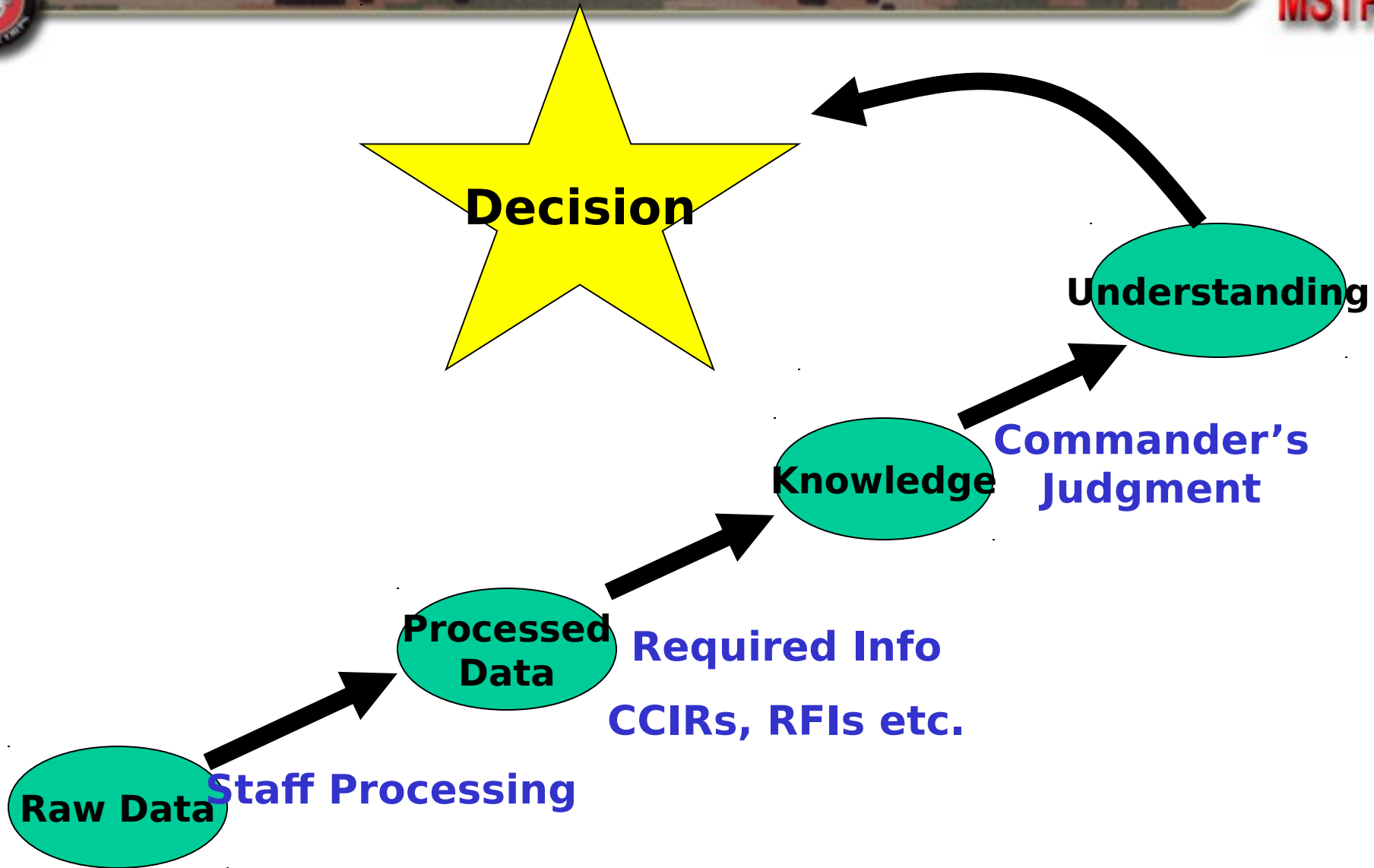
**Quality information adds value to the decisionmaking process.**

MCWP 3-40.2



# Information Flow Hierarchy

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# Information Formats

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- Sight is the most used human sense
  - 75% of stimuli received visually
- Graphical retention rate > verbal or textual
- Presentation formats should be commonly understood and used consistently
- Bottom Line: **The staff produces information in a format that is tailored to the commander's needs allowing rapid decision making**

# People, Processes, Systems



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- Commander (s)
- COS – the conductor
  - IMO
- Primary Staff
  - Section IMO
  - RFI Manager
  - CTP/COP Manager
  - Webmaster
- IM is not just a G-6 function

# Process - Im Plan



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- Information Management Plan (IMP)
  - Provide guidance and direction to ensure availability of QUALITY INFORMATION throughout the MAGTF
  - Allows the Commander TIME TO ASSESS conditions
  - Supports PRIORITIES
  - Facilitates DECISION-MAKING

# Elements Of An IM Plan

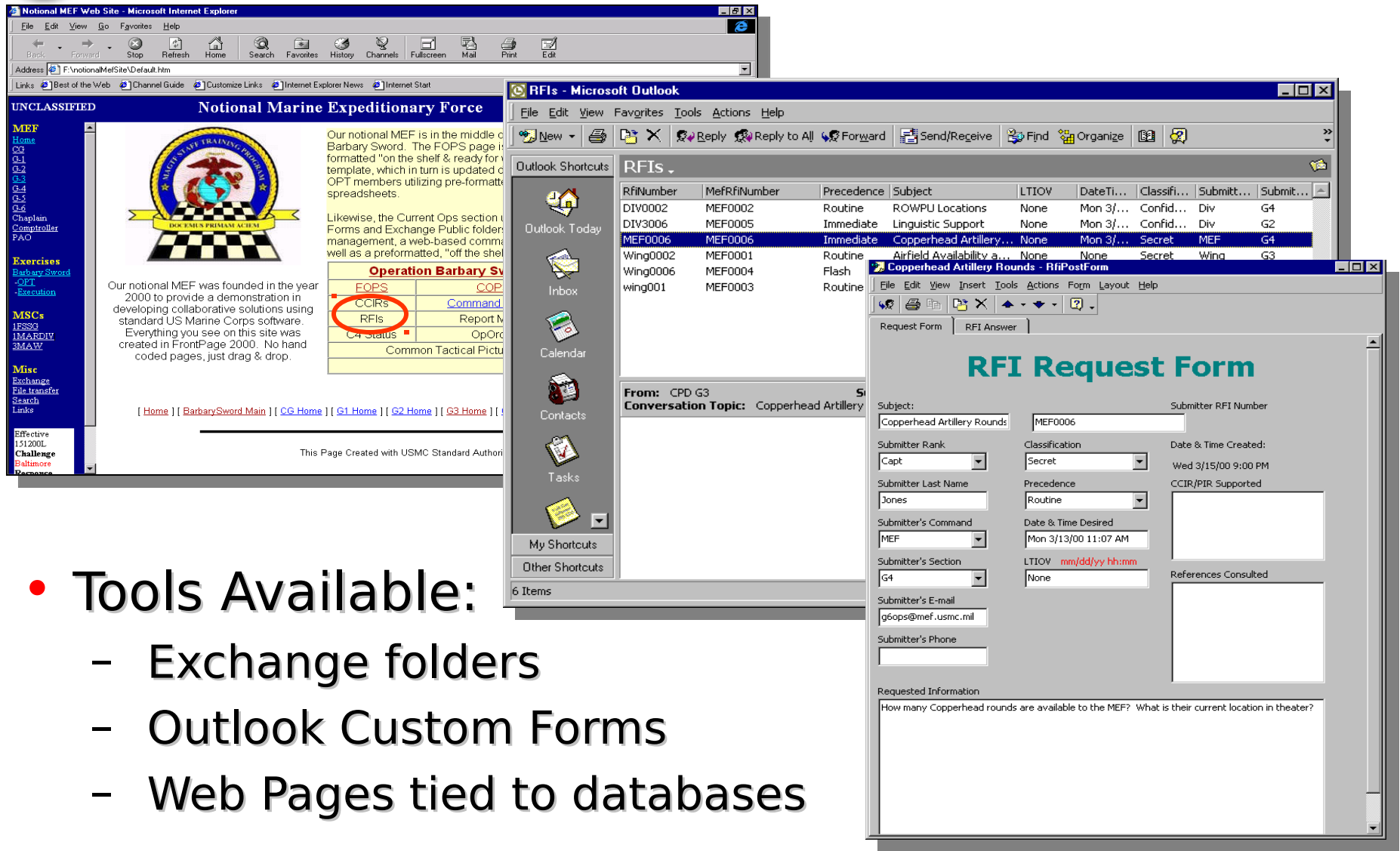


MSTP

RFI Management Procedures	Collective system to avoid redundancy, share info with force
CCIR Management Procedures	Focus Information; support Cmdr's needs
Track Management Procedures	Situational Awareness, ensure correct unit locations
Intranet/Internet Management	Share non C2 System Information, beware of all "pull vs push"
Collaborative Planning Procedures / Tools	MS Outlook, Calendaring, Netmeeting
Reports Formats	Consistency in format, Delivery Means, Priority, by whom, when
Assessment Plan	Tied to IM Plan

# RFI Management

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The screenshot displays the Notional Marine Expeditionary Force (MEF) website in Microsoft Internet Explorer and the Microsoft Outlook interface. The website, titled "Notional Marine Expeditionary Force", features a navigation menu on the left with links to MEF Home, G1, G2, G3, G4, G5, G6, Chaplain, Comptroller, PAO, Exercises, Barbary Sword, CPT, Execution, MSCs, JESSG, IMARIV, JMAW, Misc, Exchange, File transfer, Search, and Links. The main content area includes a logo, a description of the MEF's role, and a table titled "Operation Barbary Sword" with columns for FOPS, CQP, CCIRs, Command, RFI, Report, C4 Status, and OpOrc. The Outlook interface shows a list of RFIs (Request for Information) with columns for RFI Number, MefRFI Number, Precedence, Subject, LTIOV, Date, Classification, and Submitter. The "RFI Request Form" is also visible, containing fields for Subject, Submitter Rank, Classification, Date & Time Created, Submitter Last Name, Precedence, Date & Time Desired, Submitter's Command, LTIOV, Submitter's Section, Submitter's E-mail, Submitter's Phone, and a section for Requested Information.

Tools Available:

- Exchange folders
- Outlook Custom Forms
- Web Pages tied to databases

# Reports Matrix



**MSTP**

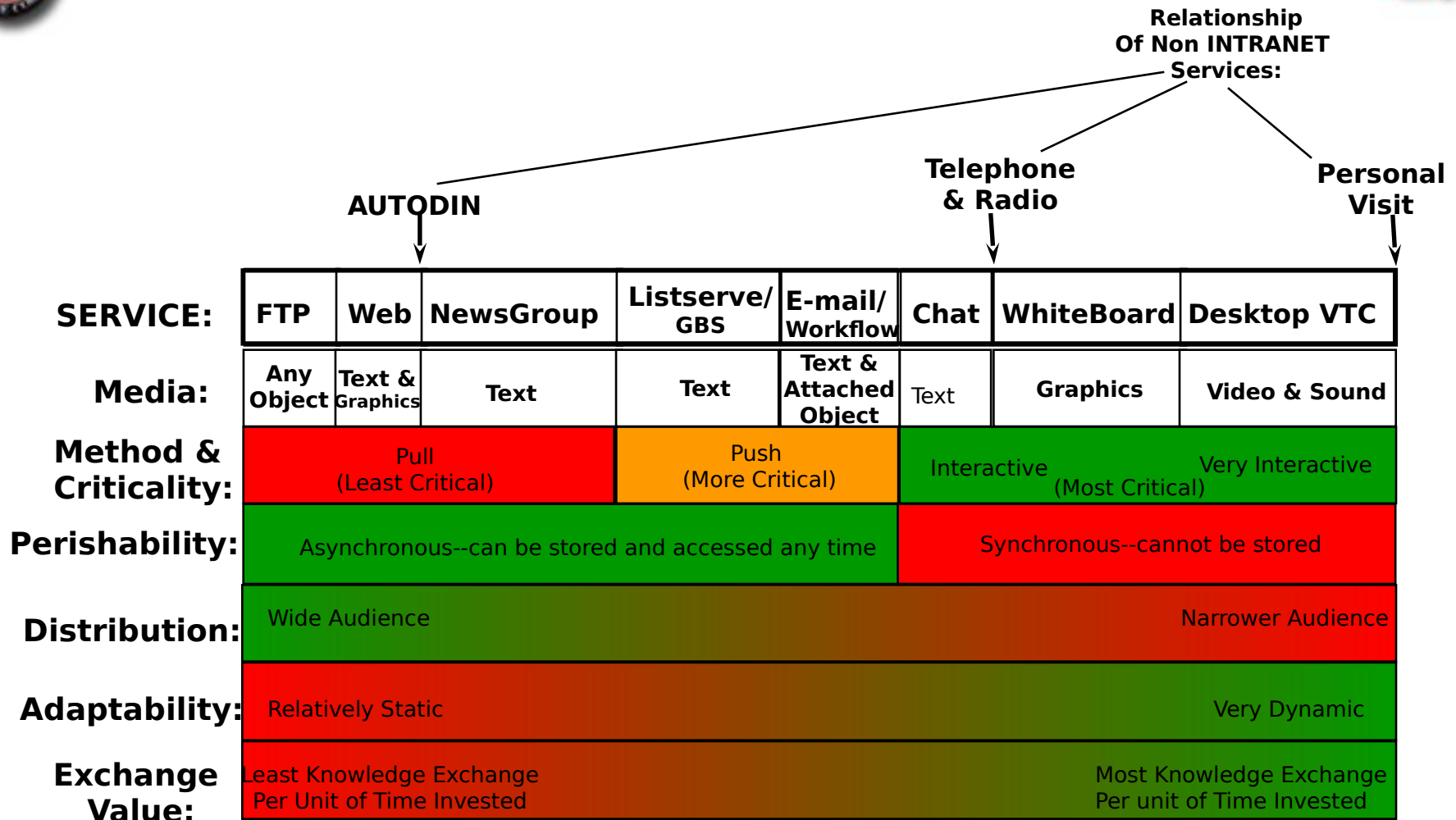
<b>INFORMATION</b>	<b>FROM LOCATION BILLET</b>	<b>TARGET LOCATION / BILLET</b>	<b>TIME/FREQUENCY</b>	<b>SIPR EMAIL</b>	<b>DSVT/SNVT</b>	<b>STUIII</b>	<b>C2PC</b>	<b>PUBLIC FOLDER</b>	<b>RFI SYSTEM</b>	<b>WEB SITE</b>
FRAGO	MEF	MSC	AS REQ	PRIMARY				TERTIARY		SECONDARY
INTSUM										
INTREP										
SALUTE										
NBC CONDITIONS										
BDA REPORTS	G2	G3		PRIMARY	TERTIARY					SECONDARY



# Information Dissemination Options



**MSTP**



# People, Processes, Systems



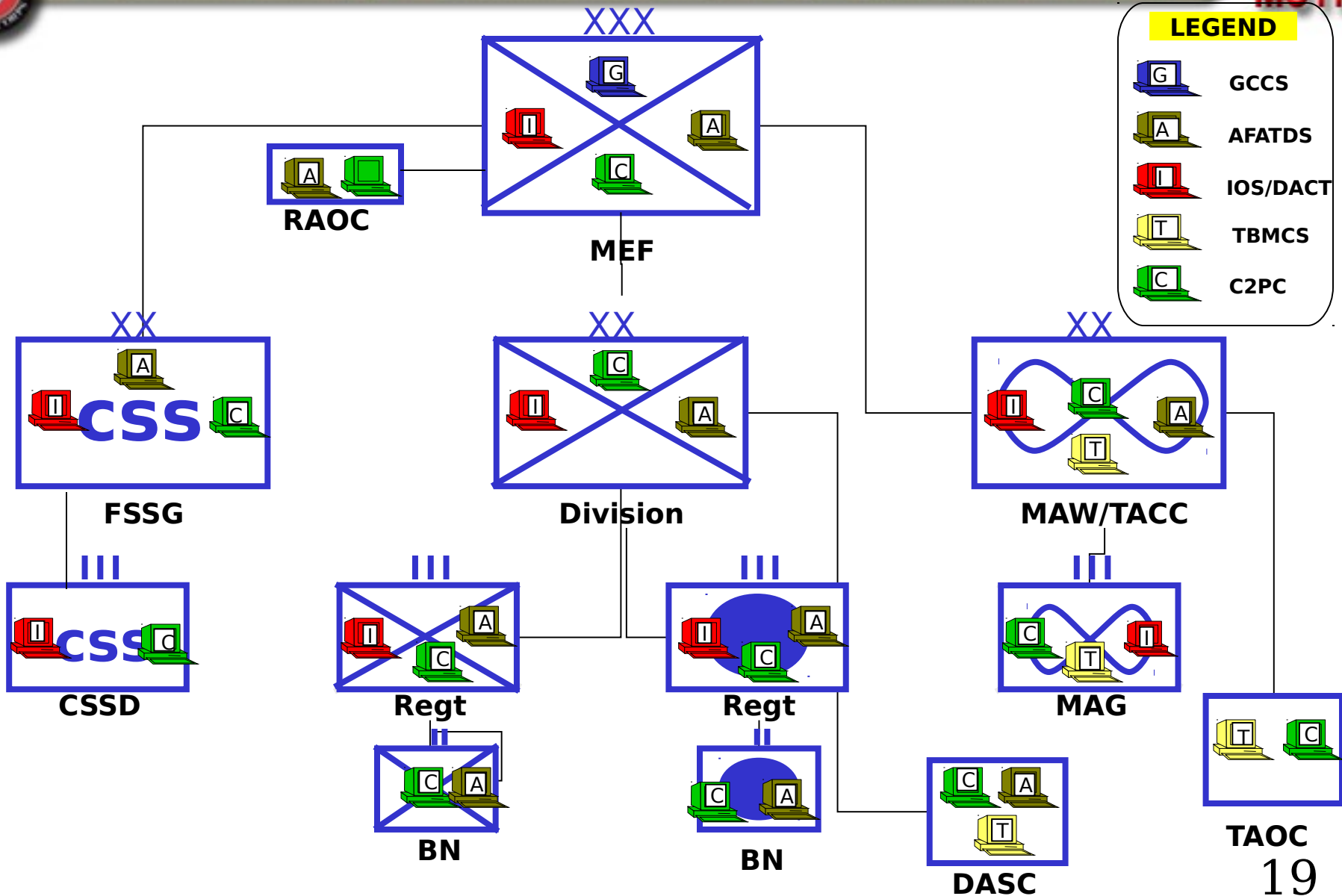
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- GCCS-based systems
  - Intelligence/Operations Server V1 (IOS (V1)) – Ops Variant
  - Intelligence/Operations Server V2 (IOS (V2)) – Intel Variant
- C2PC-based systems
  - Intelligence/Operations Workstation (IOW)
    - Intel Office
    - Effects Management Tool (EMT)
  - Data Automated Communications Terminal – Mounted (M-DACT)
  - Data Automated Communications Terminal – Dismounted (D-DACT)
- Advanced Field Artillery Tactical Data System (AFATDS)
- Theater Battle Management Core Systems (TBMCS)
- **Don't forget automated office applications from Bill Gates!**

# C2 System Architecture



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# What Is A Track?



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- An Icon representing an active element of battlespace
  - Many types of tracks
- Dynamically plotted on a map background
  - The tactical display
- Not just a symbol
  - Name
  - Size
  - Type
- Doctrinal colors & icons
  - Indicates type and threat status
  - MILSTD 2525

# Purpose Of Track Management



MSTP

- To provide the Commander with an accurate graphical depiction of friendly and enemy forces to increase situational awareness and facilitate DECISION MAKING
- The goal is an accurate COMMON TACTICAL PICTURE

# Systems That Support CTP



MSTP

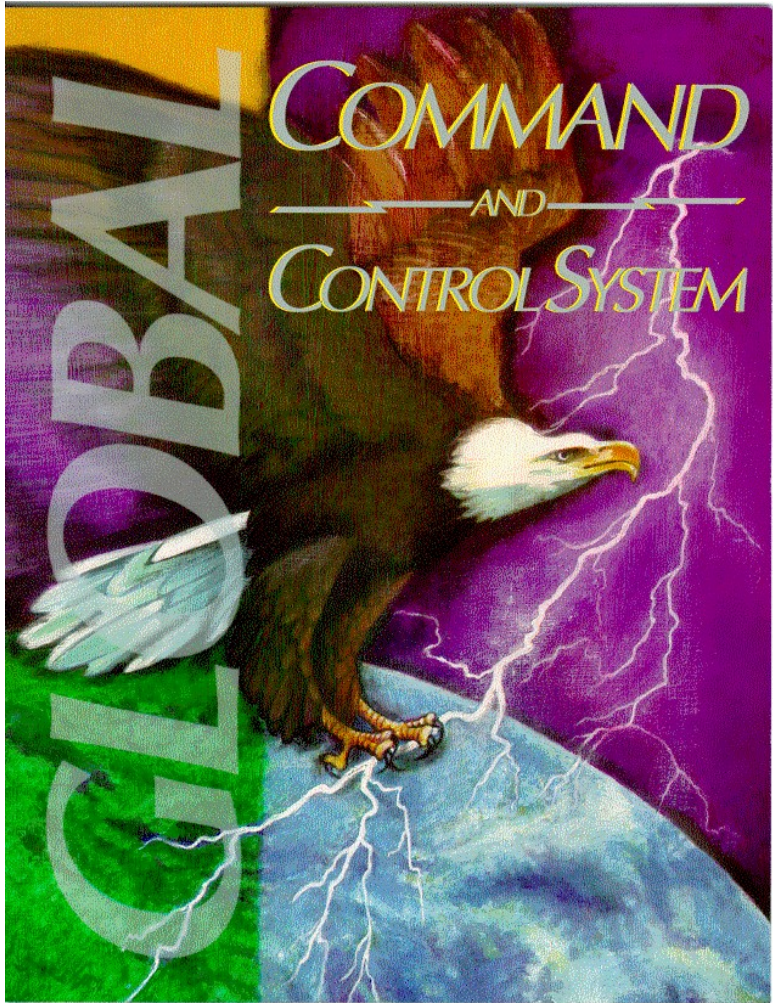
- Global Command Control System
- Intelligence Operations Server v1
- Intelligence Operations Server v2
- Advanced Field Artillery Tactical Data System
- Command & Control Personal Computer



# GCCS



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## Global Command & Control System

# GCCS Functional Capabilities



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- Two primary areas of functionality:
  - Force Deployment Planning and Execution
    - Joint Operational Planning and Execution System (JOPES)
      - Deliberate Planning
      - Crisis Action Planning & Execution
  - Situational Awareness
    - Acts as Joint Track Database Manager (Top COP)
    - Acts as Joint MIDB (Modernized Integrated Database) Server
    - Fuses, displays and disseminates products, information, and reports from all active elements of the battle space in both the Joint and Multi-National arena's





# IOS V1 & IOS V2



MSTP

- V1 = **Operations** component of the MAGTF C4I software baseline
- V2 = **Intelligence** component of the MAGTF C4I software baseline
- Provides the ability to receive, fuse, select and display information both threat and friendly from many sources, and disseminate selected information throughout the battlespace.
- Digital Overlays
  - Maneuver
  - FSCM
  - IPB
- Display enemy/friendly situations
  - Modernized Integrated Database (MIDB) (v2)
  - Track Database Manager (TDBM)





# AFATDS

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## Advanced Field Artillery Tactical Data System



# Attributes



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- Fire Support component of the MAGTF C4I software baseline
- A multi-service automated Command & Control System designed for Fire Support Operations that Integrates Fire Support Coordination with Tactical Fire Direction
- AFATDS Provides
  - Integrated responsive and reliable fire support
  - A means to input detailed attack guidance and criteria
  - Display & dissemination of current friendly and enemy situations
  - A database which supports continuity of operations
  - Interface with local and wide area networks



# AFATDS Interfaces

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- AFATDS interfaces with:
  - IOS v1
  - IOS v2
  - TBMCS
  - GCCS

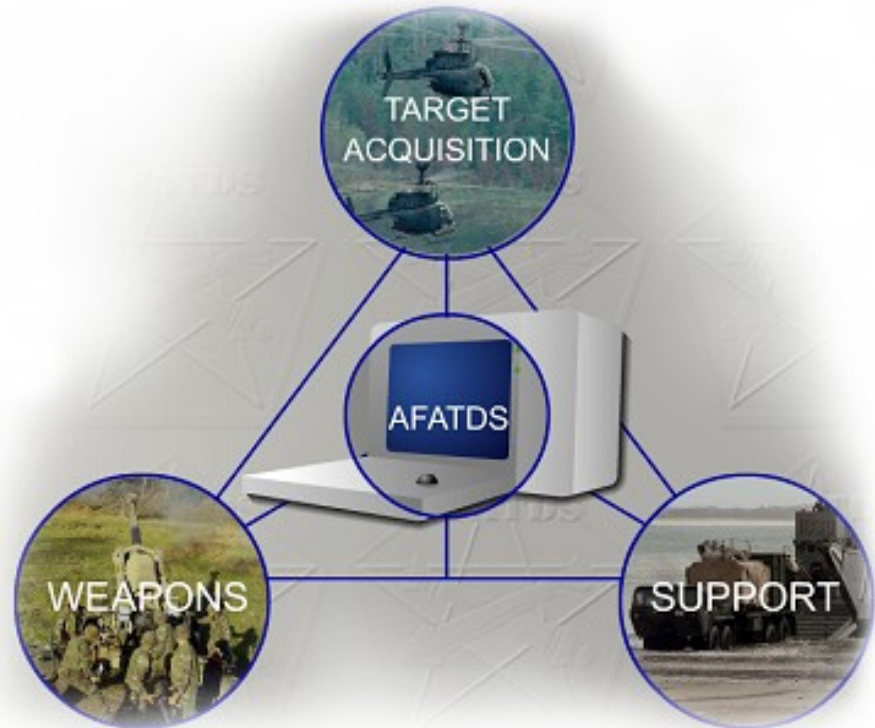




# Functionality

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- Fire Support Planning
- Fire Support Execution
- Fire Support Coordination
- Movement Control
- Unit Management & Logistics
- Situational Awareness



# TBMCS



MSTP

Theater  
Battle  
Management  
Core  
Systems





# TBMCS Provides



MSTP

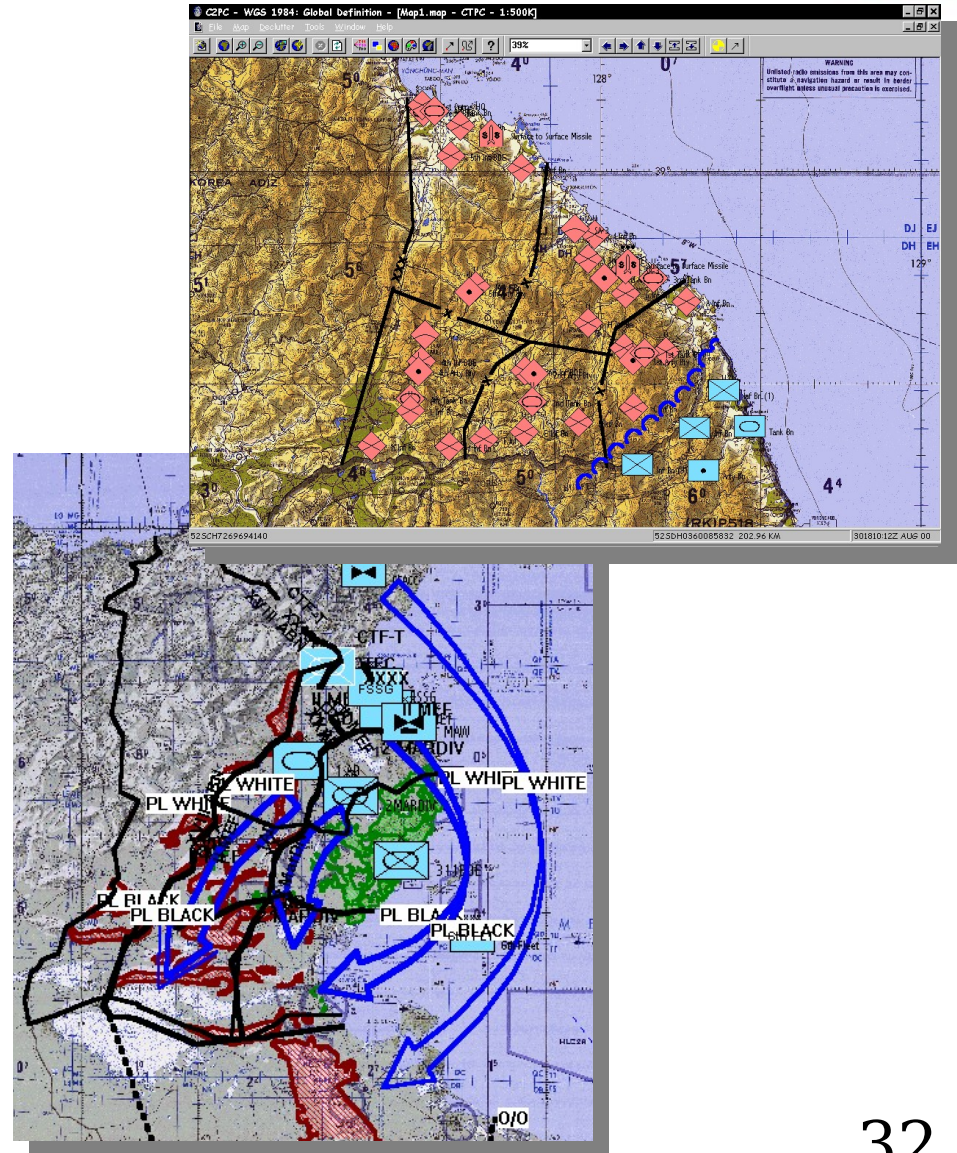
- ATO and ACO production
- Air Battle Planning
- Air Battle Execution Management
- Situation and target analysis
- Enemy-course-of-action prediction
- Collection-management support
- Maintains local Order-of-Battle and threat databases
- Air Defense Artillery and Friendly Unit Aircraft Reports
- Surface Command and Control Reports
- Missiles, Mission, Base Reports
- Verify effective utilization of offensive, defensive and support assets
- Verify that mission support needs are satisfied
- Manage and de-conflict Airspace
- Generate, change and monitor the Airspace Control Order
- Verify the consistency and completeness of the Air Battle Plan and Air Tasking Order

# Command & Control PC



MSTP

- Client software for IOS
- Provides the ability to display, manipulate and dynamically update the Common Tactical Picture in a Windows friendly environment to facilitate real time reporting
- Ability to display Operational Graphics
  - Overlays
    - Operationally Templating
    - Maneuver Graphics
    - Planning
  - Routes
  - Symbols
  - Tracks

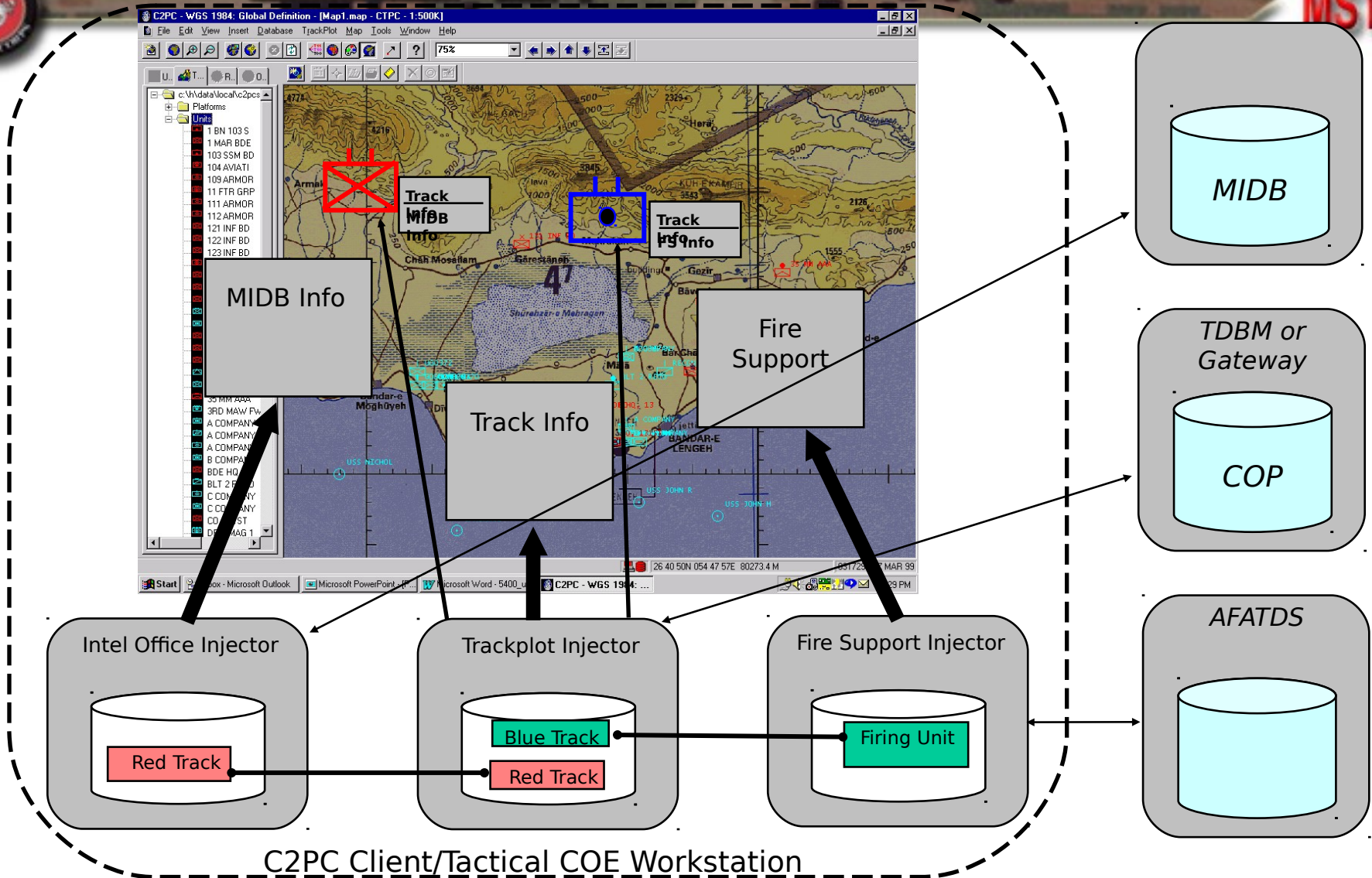




# C2PC Track-plot Data Linking



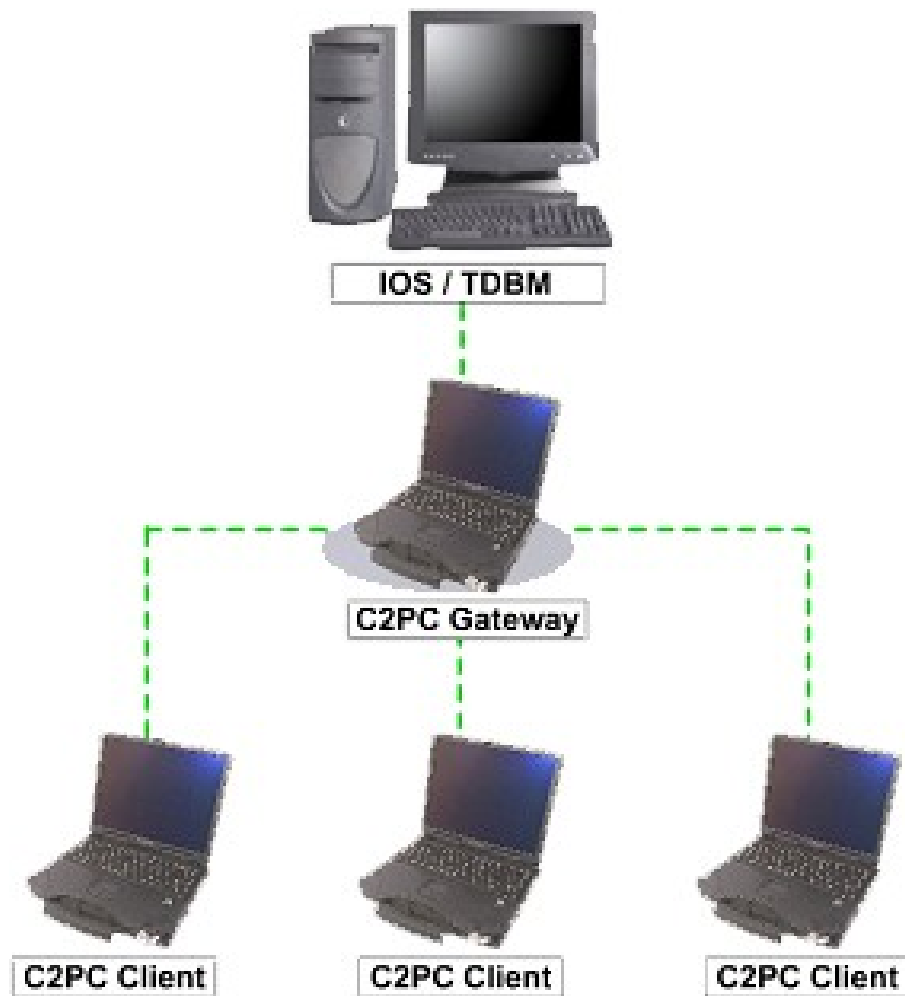
MSTP



# C2PC Communication



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# Current Challenges

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- Training
  - No MOS for ground C2 system operator – IOS v1
  - Perishable skills
  - Unix administration(IOS, TBMCS, AFATDS) very difficult at the lower echelons
- Complex architecture
  - Requires close coordination between systems end users, systems administrators and communications personnel
- Limited “on the move” and “over the horizon” communications pipes.
- Integrating automated office solutions with doctrine based C2 systems

# Summary



MSTP

- Described and defined IM
- Identified IM characteristics and processes
- Presented key IM personnel
- Identified USMC and Joint systems
- Provided a synopsis of current challenges